SPAROW

... a surveillance and reconnaissance, low altitude/short range UAV system







SPARROW



Sub-Tactical Unmanned Aerial Vehicle's (Sub-Tac UAV's) provide cost-effective Intelligence, Surveillance, and Reconnaissance (ISR) capabilities, as well as Situational Awareness, Force Protection & Security, and Remote Warfare Operations. The emerging capabilities of Sub-Tac UAV System Solutions provide a new dimension to Airborne Multi-Missions. The overall challenge is balancing cost, performance, and logistics, whereby; the advantages of technology are leveraged to provide fully operational and affordable systems meeting mission objectives.

The Sparrow UAV is a launched and retrieved small UAV with day/night, stabilized Electro-optic surveillance and recognition capabilities flying autonomously, manually or mixed as required. The Sparrow UAV system is available for flight demonstrations.

A typically configured fully fueled "Sparrow" weighs approximately 30 Kg and carries a mission payload of 10 Kg, while cruising at 60-70 knots for more than four hours. The UAV can be modified with a larger fuel tank, which would allow for longer endurance.

- **Easy Operation:** Automatic Catapult launch and parachute recovery.
- **Operational Flexibility:** Using two-ground station elements (Mini-GCS & LRE) and a Portable Video Receiving Station (PVRS).
- Minimizing Of Logistics: Due to its size, weight, and 2 person operation
- Sensor-to-Shooter (STS): Target acquisition data and video images are transferred directly to artillery commanders.



Operating Radius	>20 km (omni ant.), >120 km (directional ant.)
Powerplant	2 cylinder, 2 stroke, gasoline engine (85/87 MOGAS with premix)
Wingspan	2.44 m
Length	2.14 m
Max. Take-off Weight	40 kg (12 kg payload)
Endurance	>4 hrs
Speed	50 - 100 knots IAS
Payload	Day / Night electro-optical (3 km mansized target detection)
Datalink	2 RF command uplinks, real-time data & video downlink
Guidance / Tracking	EMIT Avionics - Using pre-planned waypoints which can be overridden, reprogrammed & resumed in flight, and auto return to launch point
Launch	Bungee / Pneumatic Launcher System (Automatic system)
Landing / Recovery	Parachute system (Automatic system)
Set-up Time	20 min. from time of removal from shipping containers
Crew	1 GCS operator, 1 launch / recovery operator





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